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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,533	12/11/2003	Blake C. Chenevert	EH-10965 (03-435)	7730
34704	7590	03/10/2005	EXAMINER	
BACHMAN & LAPOINTE, P.C. 900 CHAPEL STREET SUITE 1201 NEW HAVEN, CT 06510			COCKS, JOSIAH C	
			ART UNIT	PAPER NUMBER
			3749	

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/733,533

Applicant(s)

CHENEVERT ET AL.

Examiner

Josiah Cocks

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 1-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/11/2003</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-11, drawn to an apparatus for providing detonative cleaning, classified in class 134.
  - II. Claims 12-16, drawn to a method of cleaning using combustion gases, classified in class 431, subclass 3.
2. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus can, for example, be used as a coupling device between two fluid conduits in a heat exchanger.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. In a telephone call made by Examiner Carrillo to applicant's representative on 8/4/04 a provisional election was made with traverse to prosecute the invention of Group II, claims 12-16.

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Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-11 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### ***Drawings***

5. The drawings filed 12/11/2003 are accepted by the examiner.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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8. Claims 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,277,153 to Kakabaker ("Kakabaker") in view of U.S. Patent No. 4,333,742 to Tanca ("Tanca").

Kakabaker discloses in Figures 1-4 a method for cleaning a vessel of a fuel burning power plant or similar boiler similar to that described in applicant's claims 12-16. In particular, Kakabaker describes a vessel that receives a soot blower device through an access opening (see col. 1, lines 14-20). The soot blower device includes an insertion portion that is inserted into the vessel and forms a seal by means of a seal-bearing arrangement (41). The soot blowing device includes a valve (16) that is opened to release superheated steam into the vessel, after which the device is withdrawn from the conduit (see col. 6, line 53 through col. 7, line 5). Valve (16) is considered to be the second valve recited in applicant's claims.

In regard to the recitation of a first valve, the examiner considers that the vessel would necessarily have a first valve for sealing off the vessel when the soot blower device is withdrawn. Therefore, this valve is considered inherent in the disclosure of Kakabaker.

In regard to claim 16, OFFICIAL NOTICE is taken that valves employing pivotal movement and valves being manually opened are well known in the art. A person of ordinary skill in the art would reasonably select well known valve types for those disclosed in Kakabaker.

Kakabaker discloses the use of superheated steam as the cleaning fluid, but possibly does not disclose the use of combustion gases as recited in applicant's claims.

Tranca teaches a soot blower in the same field of endeavor as Kakabaker. In Tranca, a soot blower employs combustion fuel gases for cleaning (see col. 1, line 57 through col. 2, line

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8). Tranca also acknowledges that it is understood in the art that combustion product/flue gases may also be used as the cleaning fluid (see col. 1, lines 23-27).

Therefore, in regard to claim 12-16, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the method of cleaning step of using superheated steam of Kakabaker to incorporate the step of using either combustion fuel gases or combustion product/flue gases as taught by Tranca as such gases are understood in the art to be satisfactory in dislodging built-up residue (see Tranca, col. 1, lines 23-27) and in the case of combustion fuel gases, desirably preserve the heating value of the fuel gas when the device is used in a coal gasifier (see Tranca, col. 3, lines 3-9).

### ***Conclusion***

9. This action is made non-final. A THREE (3) MONTH shortened statutory period for reply has been set. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patents to Bjorklund, Terry, Koog et al., Lee et al., Krowech et al., and Japanese Patent No. 57-161500 are included to further show the state of the art concerning methods of cleaning.


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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Josiah Cocks whose telephone number is (571) 272-4874. The examiner can normally be reached on weekdays from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus, can be reached at (571) 272-4877. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair>. Any questions on access to the Private PAIR system should be directed to the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

jcc  
March 7, 2005

  
JOSIAH COCKS  
PRIMARY EXAMINER  
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